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December 31, 2002

Commissioner Ernesta Ballard
Alaska Department of Environmental Conservation
410 Willoughby Ave., Suite 303
Juneau, AK 99801

Via Fax and Email: (907) 465-5070
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Ref: Air Permits Work Group Final Report

Dear Commissioner Ballard:

Attached please find the final report of the Air Permits Work Group, established in August by the department to help guide ADEC in crafting the future for the Air Permits Program at ADEC.

The Air Permits Work Group consisted of representatives from the oil and gas, mining, electrical power and fish processing industries, the military, and citizens organizations. It worked by consensus, adopting this report without objections.

I appreciated the opportunity to facilitate this Work Group as it grappled with challenging technical and public policy issues. Please do not hesitate to contact me if you have any questions regarding the report.

Sincerely,

Brian Rogers
Facilitator

cc: Members of the Air Permits Work Group:
Carl Harmon, Alaska Rural Electric Cooperative Association
Jordan Jacobsen, Alaska Oil and Gas Association
Tom Kuckertz, Prince William Sound Regional Citizens'
Advisory Council
Charlotte MacCay, Council of Alaska Producers
Mike Munger, Cook Inlet Regional Citizens' Advisory Council
Kate Siftar, U.S. Department of Defense
Tom Chapple, Alaska Department of Environmental Conservation
John Kuterbach, Alaska Department of Environmental
Conservation

**Alaska Department of Environmental Conservation
Air Permits Work Group Report**

The Work Group

The Alaska Department of Environmental Conservation (ADEC) created this Work Group to develop proposed short-term and long-term recommendations for changes to ADEC's air permitting program. Members were selected by ADEC to represent affected industries and the public. The Work Group met four times, with numerous sub-group meetings by teleconference and electronic mail. ADEC selected Information Insights to facilitate Work Group meetings.

Members of the Work Group include¹:

Carl Harmon, Alaska Rural Electric Cooperative Association
Jordan Jacobsen, Alaska Oil and Gas Association
Tom Kuckertz, Prince William Sound Regional Citizens' Advisory Council
Charlotte MacCay, Council of Alaska Producers
Mike Munger, Cook Inlet Regional Citizens' Advisory Council
Kate Siftar, U.S. Department of Defense
Tom Chapple, Alaska Department of Environmental Conservation
John Kuterbach, Alaska Department of Environmental Conservation
Facilitators: Brian Rogers and Judy Erickson, Information Insights

Executive Summary

The Work Group recommends that the State of Alaska retain the responsibility to implement the Title V air operating permit program and Clean Air Act Title I major new source review programs, continue to implement the SIP and continue regulating minor source review, subject to further review as explained later in this report, provided that ADEC implements measures outlined in these recommendations to improve the efficiency and responsiveness of the air permitting Program:

- **Construction Permitting** -- The Work Group concludes that new source review in Alaska is needlessly complex and that the process takes far too much time to issue permits. The Work Group endorses legislative and regulatory measures to more closely mimic the revised federal 40 CFR Part 51 (PSD/NSR – Prevention of Significant Deterioration / New Source Review) program and to incorporate the major new source review program reforms adopted by the EPA Administrator on November 22, 2002. Minor new source review must be expedited and simplified. Construction permitting in Alaska must account for the unique geographic and environmental conditions (see attachment A) that affect business and facility operations in Alaska.

¹ Stephanie Madsen, representing the fish processing industry, was unable to attend the final meeting and did not participate in approving the report. T.C. Wilson represented ARECA for the first two meetings.

- **Title V Permitting** -- The Work Group finds that the ADEC's difficulty in timely issuance of Title V permits is at least partially a consequence of the fact that the Alaska Title V program is broader in scope and different in content from the federal template codified in 40 CFR Part 70, the model on which most states have relied in developing their Title V programs. The Work Group recommends legislative and regulatory measures that allow the department to adopt a federal core Title V program. The rulemaking should include a requirement that monitoring, record-keeping and reporting consider Alaska's unique characteristics.
- **Program Funding** -- The Work Group finds that the current system of funding air permitting in Alaska through a combination of emission fees and hourly permit administration fees lacks the stability and predictability to enable ADEC to respond effectively to changes in the number and complexity of air emissions sources in the state. In addition the Work Group believes the hourly permit administration fee structure contributes to the Department's inability to promptly process permit applications. The Department should collaborate with stakeholders to develop legislation to address the shortcomings in the current fee system. The Work Group recommends that the revised funding mechanism for the construction permit program should include a series of flat fees for defined services, and consider negotiated project-specific fees for complex projects, in place of hourly permit administration fees. The Work Group looked at fee structures of other states (see Attachment B). The Work Group recommends that the department provide a justification for any proposed fee increase. The future level of emission fees should be based on the department's demonstrated budgetary needs, subject to continuing legislative appropriation and review by the next Work Group of whether there is adequate funding, accounting for Alaska's unique conditions.
- **Mission Statement and Management Plan** -- The Work Group recommends ADEC's Division of Air and Water Quality adopt an air quality mission statement, and develop and implement a management plan to implement the mission statement that includes:
 1. A business plan that provides position by position budgeting and responsibilities;
 2. Performance measures for staff;
 3. Standard Operating Procedures (SOPs) for the staff that ensure timely, predictable permits and permit terms;
 4. Utilization of contractors to support workload peaks and to acquire cost effective and timely expertise for consulting and preparing draft permits;
 5. Management oversight to ensure consistent implementation of rules and policies.
- **Implementation** -- The Work Group recommends that the department extend the term of service of this Work Group, or appoint a similar advisory body representing the interests of diverse stakeholder groups, to work with the department to implement the recommendations provided above, including a

package of legislative and regulatory measures to secure authority for prompt implementation of these reforms. Specific issues requiring additional work include:

1. Air permit fees. The department prepared a preliminary analysis of costs and fee levels required to support the Work Group's recommendations, but there was insufficient time for the Work Group or the department to review and refine the analysis.
2. Technology standards. The Work Group did not complete deliberations on the issue of delegation of responsibility for federal technology standards (NSPS, NESHAPs and MACT standards), and the effect of delegation on the state regulatory structure.
3. Minor new source review. The Work Group did not provide a specific recommendation for changes to the minor new source review program in light of the recommended changes in the PSD and Title V permit programs.
4. Increments. The Work Group did not address how the state should deal with the substantial differences in size of baseline areas for air quality in Alaska versus other states, or how to change Alaska's baseline areas to make them comparable to the rest of the country.

Construction Permitting

Background:

The Work Group concludes that new source review in Alaska is needlessly complex and that process takes far too much time to issue permits. The state's Prevention of Significant Deterioration and New Source Review (PSD / NSR) construction permitting program came into effect in 1983, shortly after the federal PSD rules were adopted nationally. The state's PSD program has remained relatively unchanged since 1983, but EPA's PSD guidance and focus has changed over time. The Alaska new source review rules deviate from federal requirements in ways that in some cases make permitting more costly and resource intensive. EPA recently adopted major revisions to the PSD program. The new EPA rules have clarified requirements and will subject fewer projects to PSD permitting. ADEC will still be required to prevent significant deterioration of air quality in the state.

Recommendations:

The Work Group endorses legislative and regulatory measures to more closely mimic the revised federal 40 CFR Part 51 (PSD/NSR) program and to incorporate the major new source review program reforms adopted by the EPA Administrator on November 22, 2002. Minor new source review must be expedited and simplified. Construction permitting in Alaska must account for the unique geographic and environmental conditions that affect business and facility operations in Alaska.

The state should maintain a state-approved, rather than delegated, PSD/NSR construction permit program.²

The governor should introduce legislation to more closely mimic the revised federal 40 CFR Part 51 (PSD/NSR) program during the 2003 session for passage by the 23rd Alaska Legislature. The Department of Law should conduct a review of the air quality statutes to identify any impediments to a speedy adoption of the revised federal PSD/NSR program, as modified by the new rules. ADEC, working with stakeholders, should be prepared to draft the necessary statutory changes to implement the recommendation as well as any changes deemed necessary to address changes in the scope of regulation of minor sources.

ADEC should streamline the PSD program and adequately staff it so construction permits can be issued within six months of application. ADEC should be authorized and encouraged to use contractors to manage peak workload demand.

The state should continue to use fast track mechanisms (such as owner requested limits and pre-approved limits) for sources that can maintain operating levels below permitting thresholds.

Title V Permitting

Background:

The Work Group finds that ADEC's difficulty in timely issuance of Title V permits is at least partially a consequence of the fact that the Alaska Title V program is broader in scope and different in content from the federal template codified in 40 CFR Part 70, the model on which most states have relied in developing their Title V programs.

Recommendations:

The Work Group recommends legislative and regulatory measures that allow the department to adopt a federal core Title V program. The Work Group recommends that any funding proposals should be tied to the implementation of a Part 70-type program.

All members of the Work Group support the state retaining primacy for the Title V operating permitting program, provided changes can be made to streamline the program and adequately fund it. Making Alaska's Title V operating permit program more like a federal Part 70 program will provide consistent terminology, and more streamlined and consistent permit processes. The Work Group recommends the rulemaking include a requirement that monitoring, record keeping and reporting consider Alaska's unique characteristics.

ADEC should initiate a benchmarking and process analysis for Title V monitoring, record-keeping and reporting, similar to the effort undertaken for the PSD program, for the Title V Operating Permit Program to recommend streamlining opportunities. ADEC should improve permit quality through the implementation of pre-application meetings and standardized formats.

² ADEC has never issued a nonattainment new source review (NSR) construction permit

Program Funding

Background:

The Work Group finds that the current system for funding air permitting in Alaska through a combination of emission fees and hourly permit administration fees lacks the stability and predictability to enable ADEC to respond effectively to changes in the number and complexity of air emissions sources in the state. In addition the Work Group believes that hourly permit administration fee structure contributes to the department's inability to promptly process permit applications.

ADEC has started to build a cost-model for the air permit program based on the Work Group's anticipated recommendations regarding the Title V operating and PSD construction permitting programs. In that model, ADEC plans to evaluate the level of funding needed to meet federal requirements over the next three fiscal years. Included in the analysis will be the costs for ADEC to make the necessary statutory and regulatory changes to its air permit program, including any needed Work Group processes, and to enhance its service delivery. ADEC will evaluate how a new funding regime that utilizes a fixed application fee and emissions fees (or a set of fixed fees plus emissions fees) will impact permittees.

Recommendations:

The Work Group recommends that the department provide a justification for any proposed fee increase. The department should collaborate with stakeholders to develop legislation to address the shortcomings in the current fee system. The Work Group recommends that the revised funding mechanism for the construction permit program should include a series of flat fees for defined services, and consider negotiated project-specific fees for complex projects, in place of hourly permit administration fees. The Work Group looked at fee structures of other states. The future level of emission fees should be based on the department's demonstrated budgetary needs, subject to continuing legislative appropriation and review by the next Work Group of whether there is adequate funding, accounting for Alaska's unique conditions.

The proposed fee schedule should provide that all permittees pay fees. To the extent it is cost-effective, fees should be fairly allocated such that the costs of each program are borne by the emitting parties, including those parties using fast track mechanisms (such as owner requested limits and pre-approved limits).

ADEC should be authorized and encouraged to use contractors to manage peak workload demand. ADEC should consider adopting air permit regulations that allow permit applicants to voluntarily pay the costs of contractors to assist DEC in processing permit applications.

FY03 Shortfall Background:

ADEC has entered into an agreement with the Environmental Protection Agency (EPA) to issue all Title V permits by November 2003. The division will experience a cash flow problem this spring if the division fills the four new oil and gas positions the Legislature authorized in the FY 03 budget. Additionally, emissions fees, which are intended to cover the division's overhead costs, will not be adequate to support emission fee-supported work. The division estimates a shortfall of approximately \$200,000.

FY03 Shortfall Recommendations:

Contingent upon ADEC's continued active participation in the air permit reinvention process and continuance of the Work Group process, the Work Group supports a supplemental general fund appropriation of \$200,000 for FY03 to address the program's revenue shortfall.³ Absent any workable solution to the funding shortfall, division staff would need to be reassigned to permit writing. This would result in reductions in inspections, compliance assistance work, complainant response, and work on the state implementation plan (SIP) and regulation changes, resulting in an inability to staff the air permit process reinvention. In addition to the supplemental appropriation, the Work Group recommends several interim measures to help address the short-term problem:

1. ADEC should encourage federal facilities to negotiate with the EPA to use SEPs (supplemental environmental projects) to fund third-party contractors to assist with permit writing and to provide training for ADEC permit writers. ADEC would oversee the contractors' work.
2. ADEC should allow regulated facilities to elect to pre-pay their emissions fees based on projected rather than actual emissions, alleviating this fiscal year's funding shortfall. Any excess fees could be credited to the facilities and applied against future fees or for use in settlements.
3. ADEC should streamline the permitting process by preparing standard permits for companies with multiple like facilities. The peculiarities of individual facilities would be worked out separately. Combined with this recommendation is the proposal to encourage permit applicants to cut and paste from existing approved permits when preparing draft permits.

Mission Statement and Management Plan

Background:

The Work Group finds the mission of the air quality programs is unclear to both the Division of Air and Water Quality and the regulated community.

Recommendations:

The Work Group recommends the division adopt the following air quality mission statement:

“ADEC air quality programs protect the health and welfare of Alaska's residents and environment in a cost-effective and efficient manner that meets federal and state requirements and ensures economic sustainability.”

The Work Group recommends the division develop and implement a management plan to implement the mission statement that includes:

- A business plan that provides position-by-position budgeting and responsibilities;
- Performance measures for staff;

³ AOGA abstains from this recommendation because it has a policy of not commenting on legislative budget decisions.

- SOPs for the staff that ensure timely, predictable permits and permit terms;
- Utilization of contractors to support workload swings and to acquire cost effective and timely expertise for consulting and preparing draft permits;
- Management oversight to ensure consistent implementation of rules and policies.

Implementation

Background:

The Work Group finds that while it was able to make substantial progress on air permit issues, there was insufficient time to analyze all information presented to the Work Group. The Work Group further finds that the reinvention of the air permits process will require continued involvement of stakeholders.

Recommendations:

The Work Group recommends that ADEC extend the term of service of this Work Group, or appoint a similar advisory body representing the interests of diverse stakeholder groups, to work with the department to implement the recommendations provided above, including a package of legislative measures to secure authority for prompt implementation of these reforms. The Commissioner should consider expanding membership to include representation from stakeholders affected only by the minor new source review program.

Specific issues requiring additional work include:

1. Air permit fees. The department prepared a preliminary analysis of costs and fee levels required to support the Work Group's recommendations, but there was insufficient time for the Work Group or the department to review and refine the analysis.
2. Technology standards. The Work Group did not complete deliberations on the issue of delegation of responsibility for federal technology standards, and the effect of delegation on the state regulatory structure.
3. Minor new source review. The Work Group did not fully discuss any potential new permitting or other mechanisms to regulate minor sources after the Title V operating permit program and the PSD construction permit program are changed to more closely mirror the comparable federal programs.
4. Increments. The Work Group did not address how the state should deal with the substantial differences in size of baseline areas for air quality in Alaska versus other states, or how to change Alaska's baseline areas to make them comparable to the rest of the country.

Attachment A: Alaska's Unique Characteristics

The State of Alaska is extremely large and sparsely populated (in EPA parlance most facilities are remote and rural). The state is relatively undeveloped with the exception of a few urban areas. There is little existing infrastructure in the way of roads, railroads, ports, rural sanitation and interconnected electric power.

In contrast, the contiguous 48 states have well developed, cost effective transportation systems and power grids, both of which were largely funded by the federal government. Alaska is struggling to provide cost effective transportation and power to its residents and businesses. Many federal funding programs for developing power infrastructure generally no longer exist, except for the Denali Commission. Applicable federal air regulations are more stringent today, in comparison to those in existence when power infrastructure was developed in the lower 48. This makes power generation an extra costly obstacle, with a higher reliance upon funding from the state, local communities and the private sector.

The added costs of technology are extremely burdensome for remote, high-cost operating locations. This is particularly true in rural Alaska where there are limited economic resources and limited economic opportunities. Many of these rural communities rank among the poorest in the nation.

Federal air quality regulations have been developed almost completely with the contiguous 48 states in mind and with little, if any, consideration of the unique conditions of Alaska. These federal regulations have been developed for equipment and resources being used in temperate, populated and well-developed western-based economies of the states. As such, the regulations and guidelines are not necessarily appropriate for Alaska's remote rural geography. The current federal air quality objective of providing nation-wide consistency runs headlong into these unique Alaska characteristics. It is important that Alaska be able to assert some discretion in the application of federal air regulations where these regulations do not contemplate Alaska's unique characteristics.

If the State chooses to operate delegated federal air programs, the unique characteristics in Alaska need to be, by program design, a major consideration in all permit development. This is most important in the PSD program. Alaska regulations need to document the existence of these unique conditions and require their consideration wherever appropriate.

Unique Alaska characteristics and their implications for air permitting

- **Permafrost**
 - Conventional construction methods may cause deterioration of permafrost
 - Construction that includes permafrost protection may be more costly
 - Construction that includes permafrost protection may take more time
 - Excavation may not be feasible in some locations, or may be seasonally limited
 - Some structures may not be suitable for certain geography (e.g., permafrost, tundra)

- Extensive fencing tends to fall down
 - Tall monitoring towers may be unstable
- Implications for air permitting
 - Requirements for fencing facility boundaries impractical
 - Requirements for tall monitoring towers may be impractical
- **Remote locations, lack of road system, railroad, and infrastructure**
 - Limited means of transporting supplies and products
 - Costs of transportation and equipment
 - Maintenance costs
 - Limited shipping season for remote sites to bring materials on site.
 - Implications for air permitting
 - Requirements to exclude public access through barriers are less necessary.
 - Requirements to monitor or patrol boundaries are less necessary and frequently infeasible or unsafe.
 - Current - increment baseline dates are inconsistent with the Lower 48 because of the large air classification areas in Alaska.
 - Lack of power grids puts the onus on individual facilities to produce their own power – as a private power producer, the developer often faces additional costs because the developer is responsible for all the burden of generating power and pollution control, rather than sharing that burden with other users. Private producers often face more stringent pollution control requirements than public or nonprofit power producers
 - Lack of power grid puts onus on small communities to develop power generation. These communities are rural and generally low-income villages with little resources to expend on complex and expensive pollution control technology.
 - In small communities, there is a lack of accessible expertise to operate and maintain power generation pollution control equipment
 - Lack of available power for offsite monitoring sites – portable generators frequently fail, invalidating data recovery requirements or contaminating data with emissions from diesel-fired equipment.
 - Lack of available power and access for offsite monitoring sites may make data collection prohibitively expensive for some projects.
 - There is a need for backup power and emergency generation, which further exacerbates costs
 - Alternative power generation through batteries may not be feasible due to short battery life in cold weather.

- Road dust potentially becomes a limiting factor for transportation and infrastructure maintenance.
 - Roads over loess soils dry out; blowing dust is difficult to control in cold climates.
 - The time schedule for construction is shortened due to shipping time limitations. Minor delays in permitting can delay construction during the available seasons for a year or more because of missed shipping deadlines.
 - Deadlines to bring a site into compliance may be too short for practicality.
- **Expanse of the state (1/5 the size of the continental United States)**
 - Limited meteorological data available
 - Wide variety of climactic conditions from temperate coastal to high arctic interior
 - Implications for environmental permitting
 - Extensive data collection is frequently required, where in other states the base data already exists
 - Misconceptions about climatic conditions are common
 - Permits may be based on a lack of ambient meteorological data.
- **Presence of migratory mammals and dangerous animals**
 - Fencing requirements obstruct migratory routes.
 - Operations are frequently curtailed during migratory periods.
 - There is limited available data on migration routes.
 - Migration routes are not always predictable.
 - Migration affects the permittee's ability to collect necessary data
 - Dangerous animals are frequently present in the field
- **Extreme cold and darkness**
 - Significant portions of the year have temperatures well below zero
 - The extreme cold and dark result in a limited construction season due to safety and shipping limitations
 - In extreme cold – sub zero temperatures
 - Concrete cannot be poured
 - Excavation may require warmer periods
 - Some materials become too rigid to work with (liners)?
 - Some equipment cannot be safely used in extreme cold
 - Extreme limited daylight during winter - 0 to 4 hours

- Safety
- Ability to see work itself
- Implications for air permitting
 - Too cold at times to safely conduct field monitoring
 - Monitoring instrumentation often fails during cold weather – batteries expire quickly.
 - Extreme cold also requires the presence of backup heat and power to protect human life. Standby life safety equipment (including portable equipment) is not treated as such in permitting.
 - Some equipment is not certified to use in extreme cold.
- **No human population impacted**
 - In a number of remote industrial settings in Alaska, there is no local human population that is impacted.
 - Strict ambient air boundaries are established for both short-term or long-term facilities that have no relationship to the risk posed by the emissions from these facilities.
 - Current practices of establishing ambient air boundaries are inconsistent with goal of minimizing a development footprint “footprint”

Attachment B: Comparison of Fees

Provided to the Air Permits Work Group by EPA

PA	Current Fee (\$)	\$ Collected	Comments
NH	47.25/ton of emissions	5.2 M	
RI	81.20	2.3 M	
ME	18.87	7.3 M	
VT	32.80	628 K	
CT	59		
MA	25.14	7.5 M	
NJ	34.85	39.3 M	
NY	45	66.2 M	
PR	31	8.3 M	
VI	18	2.4 M	
DC	33.80	515 K	
MD	34.85	6.1 M	CY98 and 99 only
VA	33.44	18.6 M	CY99 and 2000 only
WVA	18.45	7 M	CY99 and 2000 only
Allegheny County	42	5.7 M	
PA	No response		
DE		17.2 M	
AL	20	32.4 M	
Jefferson County	23	6.2 M	
Huntsville	33.82	186 K	
FL	25	55.7 M	
GA	28	64.3 M	
KY	27.50	32.8 M	
Jefferson County	33.82	7.1 M	
MI	20	22.5 M	
NC	16.91	45.2 M	
Mecklenburg County	32	2.2 M	

Forsyth County	30.57	779 K	
Western NC	13.53	1.4 M	
SC	33.82	37 M	
TN	21.70; 13	24.7 M	Two fees are actual v. potential
Nashville/Davidson Counties	25	2.5 M	
Chattanooga/Hamilton	31.33; 18.80	1.7 M	Two fees are actual v. potential
Memphis/Shelby	29.65	1.7 M	Excludes 2000
Knox County	33.85	827 K	
IL	13.50	50 M	
IN	33	56.6 M	
MI	34	53.1 M	
MN	25	41.3 M	
OH	34.85	40.2 M	FY96-98
WI	33.80	68 M	
AR	19.12		
LA	No response		
NM	10.25	18.8 M	
Alb, NM	31	2.7 M	
OK	17.51	4.2 M	
TX	26		
IA	24.50	34.1 M	
KS	13	22.1 M	
MO	25.70	5.1 M	99 only
NB	No response		
Omaha	31.50	2.3 M	
Lincoln	33.82	1.9 M	
WY	10	9.6 M	
UT	31.22	19.2 M	
SD	6	2.9 M	
ND	10	5.7 M	

MT	21.12	7.4 M	
CO	14.98	18.3 M	
R9 States/locals	No response		
AK	No response		
ID	30	7.1 M	
OR	33.63	18.3 M	
LRAPA	33.63	2.1 M	
WA	No response		
Benton County	No response		
NWAPA	No response		
Olympic*	*	109 K	
Puget*	*	5.6 M	
Spokane County	*	575 K	
SWAPCA	No response		
Yakima	32.58	103 K	2000 only
		\$1 Billion	

* Information provided but too complicated to summarize here.

Note: In some cases, I guessed at amounts due to the complexity of certain State fee estimates or noted a cost/ton figure but left off additional fees due to keeping this simple. This is not meant to represent true figures (only gross amounts), so use this information in that vein.